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Not seriously misshapen means that the potato is not seriously deformed and causing more than 10% waste when determining the non-peelable area directly due to shape.

Soft rot or wet breakdown means any soft, mushy or leaky condition of the tissue such as Leak, slimy soft rot, wet type Fusarium Tuber Rot, or wet breakdown following freezing injury or heat injury.

Loose sprouts, dirt and foreign material means unattached sprouts or sprouts that become detached during the grading of the sample, stems, vines, adhering dirt, loose dirt, stones, trash and other extraneous material.

Damage means any defect listed in §51.3416, or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which cannot be removed without a loss of more than 5 percent of the total weight of the potato.

Serious Damage means any defect listed in §51.3416, or an equally objectionable variation of any of these defects, any other defect, or any combination of defects, which cannot be removed without a loss of more than 10 percent of the total weight of the potato.

External Defects are defects which can be detected externally. Cutting may be required to determine the extent of the injury.

Internal Defects are defects which cannot be detected without cutting the potato.

§51.3416 Classification of defects.

EXTERNAL DEFECTS

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Air cracks	5% waste	10% waste. 10% waste. 10% waste Smooth, not more than ½ of surface.
Enlarged lenticels, discolored or sunken. Flea Beetle Folded end	5% waste	10% waste. 10% waste 10% waste.

EXTERNAL DEFECTS—Continued

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Fusarium tuber rot Grass, wireworm . Greening, light Growth cracks Grub Ingrown sprouts Nematodes Rhizoctonia, solid	5% waste	10% waste. 10% waste. 10% waste. 10% waste. 10% waste. 10% waste. 10% waste. Not more than
or thick mounded. Rodent, bird dam-	10% of surface. 5% waste	25% of surface. 10% waste.
age. Scab, pitted Scab, russet	5% waste	10% waste. 50% of surface or 10% waste.
Scab, surface	25% of surface or 5% waste.	50% of surface or 10% waste.
Scab, surface (ele- phant hide)	10% of surface or 5% waste.	25% of surface or 10% waste.
Second growth Scaling, surface cracks—when cracked, thick and has depth.	5% waste 10% of surface or 5% waste.	10% waste. 25% of surface or 10% waste.
Sunburn Sunken discolored areas.	5% waste 5% waste	10% waste. 10% waste.

INTERNAL DEFECTS

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Occurring outside of	of or not entirely confi	ned to the vascular
Internal Black Spot, Internal Discoloration, Vascular Brown- ing, Fusarium Wilt, Net Necro- sis, Other Necro- sis, Stem End Browning.	5% waste	10% waste.
Occurring	entirely within the va-	scular ring

Occurring entirely within the vascular ring

Hollow Heart or Area affected not Hollow Heart to exceed that of with Discoloraa circle 1/8 inch tion. in diameter in a 10 ounce potato 1 Light Brown Discoloration (Brown Center).

Area affected not to exceed that of a circle 7/8 inch in diameter in a 10 ounce poArea affected not to exceed that of a circle 11/4 inches in diameter in a 10 ounce potato.1 Area afffected not to exceed that of a circle 11/4 inches in diameter in a 10 ounce potato.1

INTERNAL DEFECTS—Continued

Defects	Maximum allowed for U.S. No. 1 processing	Maximum allowed for U.S. No. 2 processing
Internal Brown Spot and similar discoloration (Heat Necrosis).	Not more than the equivalent of 3 scattered spots ½ inch in diameter in a potato 6 ounces in weight or 2½ inches in diameter, or correspondingly lesser or greater number of spots in smaller or larger potatoes.	Not more than the equivalent of 6 scattered spots ½ inch in diameter in a potato 6 ounces in weight or 2½ inches in diameter or correspondingly lesser or greater number of spots in smaller or larger potatoes.

¹ Note: Or correspondingly lesser or greater areas in smaller or larger potatoes.

§51.3417 Optional test for specific gravity.

Tests to determine specific gravity shall be made in accordance with the procedures set forth in this section.

- (a) The potatoes used for such determinations shall be:
- (1) Taken at random from a composite sample drawn from containers representative of the lot.
- (2) A comparable sample from a bulk load or storage bin.
- (3) From a portion of the divided sample initially drawn or submitted for determination of grade or contract compliance.
- (4) Representative of the lot with respect to size and quality.

The specific gravity for any lot of potatoes shall be the average of at least 3 corrected readings on separate tests from the composite sample. Specific gravity may also be determined, if requested, in accordance with size classifications or weighted value in propor-

tion to size and/or grade separations in the lot.

- (b) Specific gravity shall be determined by either;
- (1) Calculation from the weights of the sample in air and in water made with USDA approved equipment. The reading obtained from each test shall be corrected for temperature variations using Table I.
- (2) A hydrometer specifically designed for determining the specific gravity of potatoes.³

The pulp temperature of the potatoes and the temperature of water shall be recorded immediately before testing and the specific gravity reading corrected using Table I.

³The hydrometer is available from the Potato Chip/Snack Food Association, Crystal Square-3, Suite 903, 1735 Jefferson Davis Highway, Arlington, VA 22202.